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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|-------------------------------|------------------|
| 10/017,561 | 12/14/2001 | Laurence J. Cull | P02620 | 8073 |
| 7590 07/20/2004 | | | | |
| Michael L. Smith Bausch & Lomb Inc. One Bausch & Lomb Place Rochester, NY 14604-2701 | | | EXAMINER THALER, MICHAEL H | |
| | | | ART UNIT 3731 | PAPER NUMBER |

DATE MAILED: 07/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 10/017,561 | Applicant(s) CULL, LAURENCE J. | |
| | Examiner Michael Thaler | Art Unit 3731 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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Claims 1, 2 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. (6,258,111) in view of Graham (4,827,615). Ross et al. disclose a vitreous cutter (col. 1, lines 14-17) comprising housing 26, pneumatic motor (col. 4, lines 31-33) attached within the housing, cam 34 and vitrectomy probe 18. Ross et al. fail to specifically indicate that the pneumatic motor has rotatable vanes. However, pneumatic motors typically have rotatable vanes. For example, Graham teaches that fluid motors used in surgical instruments are "turbine motors" (col. 5, lines 15-18), (noting that a turbine, by definition, has rotatable vanes) wherein the turbine has the self-evident advantage of providing power to a rotatably shaft by directing pressurized fluid to the vanes of the turbine. It would have been obvious to include turbine vanes in the Ross et al. pneumatic motor so that it too would have this advantage. Cam 34 of Ross et al. would be attached to the vanes as claimed (at least indirectly) since the cam is attached to the output shaft 28 of the motor 24 (col. 4, lines 35-36) which in turn must be attached to the vanes in order for the vanes to rotate the output shaft 28.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. (6,258,111) in view of Graham (4,827,615) as applied to claim 1 above, and further in view of

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Hartman et al. (4,108,182). Ross et al. fail to disclose a cam-plate and spring in the mechanism 34, 38 that converts cam rotation to reciprocating movement of the vitrectomy probe. However, Hartman et al. teach that a mechanism that converts cam rotation to reciprocating movement of the vitrectomy probe should include a cam-plate (at 88) and spring 86 apparently to insure that the cam-plate smoothly and continuously contacts the cam 80. It would have been obvious to include a cam-plate and spring in the Ross et al. mechanism that converts cam rotation to reciprocating movement so that it too would have this advantage.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ross et al. (6,258,111) in view of Graham (4,827,615) as applied to claim 1 above, and further in view of Trott et al. (5,803,733). Ross et al. fail to disclose a brake on the pneumatic motor for selectively stopping rotation of the cam 34. However, Trott et al. teach that a pneumatic motor for a surgical instrument should include a brake to quickly prevent operation of the device as pressure is turned off (col. 2, lines 30-33). It would have been obvious to include a brake on the Ross et al. pneumatic motor so that it too would have this advantage. As to claim 6, the Trott et al. brake includes resilient arm 154 fixedly attached to the housing (at the distal

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end of 156) at one end (by frictional contact), brake-block 152 attached to an opposing end of the arm 154 (by frictional contact), wherein the resilient arm is deflected by the pressurized fluid to allow rotation of the motor (col. 5, lines 47-51). Trott et al. fail to disclose a notch on the shaft 124 to receive the brake-block. However, it is old and well known in this art to provide a notch on a rotatable shaft to receive the brake-block of a brake in order to insure that the brake-block positively engages the rotatable shaft to stop rotation thereof. It would have been obvious to include a notch on the Trott et al. rotatable shaft 124 so that it too would have this advantage. Assuming arguendo that the ends of resilient arm 154 are not considered to be fixedly attached to the housing and brake-block 152, it is old and well known in this art to positively and fixedly attach the ends of a spring to the parts that it contacts in order to insure that the assembly is positively secured together. It would have been obvious to so fixedly attach the ends of resilient arm 154 Trott et al. to the adjacent parts so that it too would have this advantage. The above well known in the art statements are taken to be admitted prior art because applicant failed to traverse the examiner's assertions (M.P.E.P. 2144.03).

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Applicant's arguments filed May 26, 2004 have been fully considered but they are not persuasive. Applicant alleges that the statement in col. 4, lines 31-33 Ross et al. "Although an electrical motor is described, it is to be understood that the motor may be a pneumatic device." refers to diaphragm driven reciprocating probes rather than rotary motors. This allegation is not well taken since Ross et al. disclosure makes no mention of changing the basic operation of the motor from a rotary motor to an axially reciprocating motor with a diaphragm. In any event, Graham teaches that a rotary pneumatic turbine motor may be used to drive a surgical cutter (col. 5, lines 15-18). Thus, the Ross et al. and Graham motors are similar in that they convert rotary motion from a rotary motor to another form of motion (either axial or lateral) for cutting. As to claim 5, the Trott et al. disclosure that the brake stops the rotary motion quickly (col. 2, lines 30-33) suggests or at least makes it obvious that it stops in less than one revolution.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action

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is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Thaler whose telephone number is (703) 308-2981. The examiner can normally be reached Monday to Friday.

The fax phone number for the organization where this application or proceeding is assigned is (703)872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0858.

mht
7/16/04


MICHAEL THALER
PRIMARY EXAMINER
ART UNIT 3731